

Work Order ID 83059

83059

Page 1

April-12-12 1:30:54 PM

Item ID: D212-664-101

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Crosstube Fwd

Start Date: 12/04/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 26/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

MLJ

Date: 12/04/12 Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D212-664-141	Rev D (DEO)								
100		0.00							
100	DOCUMENT CONTROL								
DC		0.00							
Document Control	Memo								
	Photocopy bluefile and create labels as per PPP D212-664-101		CHG005						
110	Pick Kit	0.00							
110	Packaging								
Packaging		0.00							
Packaging	Memo								
120		0.00							
120	BENDING MACHINE - CROSSTUBES								
CNC Bend 2		0.00							
CNC Alpha 160 Bender	Memo								
	Bend tube as per Dwg D212-664-141 using CNC bender program 212-fw and Folio D212-664-101								

MLJ 12/05/02

MD
12-4-12MD
12-4-16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

QC15- Crosstube Dimensional Check

0.00

130

QC

Memo

0.00

Quality Control

140

Crosstubes

0.00

140

Crosstubes

Memo

0.00

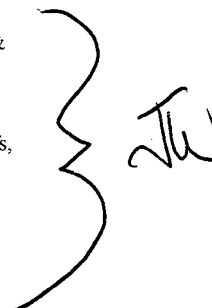
Crosstubes

1-Drill pilot holes in tube as per Dwg D212-664-141 using drill Jig DT8548 & DT8549, using drill table DT8577, set-up towers in hole #7 as per QSI 10

2-Ream hole to finish size in tube as per Dwg D212-664-141 using drill Jig DT8548 & DT8549. Check dimensions between holes, both sides on both cuffs, to ensure alignment with saddle holes.

3-Scribe part # and batch # using vibrating stylus as per Dwg D212-664-141

4-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D212-664-141



12-04-17

W/O:		WORK ORDER CHANGES					
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Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

Crosstubes Chemical Conversion

0.00

150

HandFXtube

Memo

0.00

Hand Finishing Crosstubes

Chemical Conversion Coat within 24 hours of bending and drilling

TL

12-04-07

160

QC5- Inspect part completeness to step on W/O

0.00

160

QC

Memo

0.00

Quality Control

Si 764/115

170

Outsource process - NDT per QSI038 4.1

0.00

170

Outsource2

Memo

0.00

Outsource process - NDT

Liquid Penetrant Inspection as per QSI 038
Issue P/O: *16780*
LPI as per ASTM 1417 Level 2
Attach copy of NDT results to work order

CZ 12/04/20 ①

W/O:		WORK ORDER CHANGES					
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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Receive & Inspect for Damage & Mat'l Certs	0.00							
180	Packaging								
Packaging	Memo	0.00							
Packaging	Ensure copy of NDT results attached to work order.								
190	QC5- Inspect part completeness to step on W/O	0.00							
190									
QC	Memo	0.00							
Quality Control	Inspect for damage & ensure results are as per Dwg D212-664-141								

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NS2

Start Date: 12/04/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 26/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200	Spray Painting per QSI005 4.2	0.00							
200	SprayPaint								
Spray Painting	Memo	0.00							
	1-Prime inside and outside crosstube as per QSI 005 4.2								
	2-Paint outside crosstube as per DEO D212-667-141 with White Imron as per QSI 005 4.2								
	PRIME: 120133								
	Start Time: 7:45								
	Finish Time: 8:30								
	PAINT: 120985								
	Start Time: 4:00								
	Finish Time: 5:00								
210	QC14- Inspect Spray Paint	0.00							
210	QC								
Quality Control	Memo	0.00							
	Then, Wrap in plastic bag to protect from scratches								

12-4-26 Pto →

12 04 27 (1)

Clear: 120858
Start: 10:00
Finish: 11:00 OK 12.05.03

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: DZ12-664-101 PAR #: _____ Fault Category: Landig gear / cross tube NCR: Yes No DQA: Yes Date: 12/05/14
 Resolution: Rework Disposition: Rework QA: N/C Closed Date: 12/5/14

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12/04/13	#200	while working on the weekend employee didn't have the w/o's Back from test results / Review and photos to compare tubes while while forgetting about the	U	- Strip entire tube Primer + Inman - Re Prim + Paint AS per ASTM 4.2 + Dwyer	AR 12-4-24	12-04-27	W	S 12/04/13
		inspectin window on the Bottom Bend of the tubes P.C.						S 12/04/13

NOTE: Date & initial all entries

Work Order ID 83059***83059***

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Start Date: 12/04/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 26/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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220

0.00

220

Crosstubes

Crosstubes

Memo

0.00

1-Abrade mating surfaces of support and crosstube with 400 grit sandpaper,
clean the area with 4105S wash 'n' wipe

2-Install supports with Proseal 890 per DSI9563 and QSI 015

A/R Proseal 890 Batch: 121287

3- Torque bolts as per dwg

AS 12-4-27

230

QC6- Inspect dimensions to drawing

0.00

230

QC

Memo

0.00

Quality Control

12 04 30 17

240

Pick Kit

0.00

240

Packaging

Memo

0.00

Packaging

12/5/12 sf

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Work Order ID 83059

83059

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Item ID: D212-664-101 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Crosstube Fwd
 Start Date: 12/04/2012 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 26/04/2012 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

250	QC4- 100% Inspect kits for completeness	0.00							
250									
QC	Memo	0.00							
Quality Control									

260	Packaging	0.00							
260									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D212-664-101								

270	QC21- Final Inspection - Work Order Release	0.00							
270									
QC	Memo	0.00							
Quality Control									

12-05-04

MLJ 12/05/04

YMF 12-05-04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

April-12-12 1:30:59 PM

Page 1

Work Order ID: 83059

83059

Parent Item: D212-664-101

D212-664-101

Parent Item Name: Crosstube Fwd

Start Date: 12/04/2012

Required Date: 26/04/2012

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev:E04.02.16ReformatKJ/DS

IPP Rev:F 06-03-29 Remove Coments on Pick List JLM

IPP Rev:G 07-04-30 As per Rev C

JLM

IPP Rev:H

11.04.26 inspection strip ecn 11-549 EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D212-664-101TRN		Manufactured	No			110	Each	7.0000	1	1			

D212-664-101TRN

Crosstube Turning Detail

**

Location	Loc Qty	Loc Code
FG046	3	
68584	0	
81140	1	
81141	1	
82577	1	
LG	4	
81812	1	
82574	1	
82575	1	
82576	1	

D3595-063-450

Manufactured No

230

Each

83.8095

4

4.210526

D3595-063-450

RUBBER CUSHION

**

MO 12-4-12

AB 12-4-12

Location	Loc Qty	Loc Code
LG051	73.7	
80161	73.7	
MAT052	10.109474	
67353	2	
68893	6	
70113	0.56	
71354	0.2	
74113	0.349474	
75597	1	

W/O:		WORK ORDER CHANGES					
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Picklist Print

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Page 2

Work Order ID: 83059

83059

Parent Item: D212-664-101

D212-664-101

Parent Item Name: Crosstube Fwd

Start Date: 12/04/2012

Required Date: 26/04/2012

Start Qty: 1.00

Required Qty: 1.00

MS21920-25

Purchased

No

220

Each

133.0000

4

4

MS21920-25

Clamp(per MIL-DTL-8783C)

**

AF 12-4-27

Location

Loc Qty

Loc Code

LG050

133

116264

2

117998

4

118142

4

119339

2

119746

2

120475

19

120920

100

D2893-1

Manufactured

No

220

Each

10.0000

2

2

D2893-1

2.75 Support

**

AF 12-4-27

Location

Loc Qty

Loc Code

LG052

10

72865

2

76250

1

82228

7

D3428-1

Manufactured

No

240

Each

31.0000

1

1

D3428-1

Placard

**

12/5/12

Location

Loc Qty

Loc Code

ST042

31

78933

14

81881

17

April-12-12 1:30:59 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

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Page 3

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Parent Item: D212-664-101

D212-664-101

Parent Item Name: Crosstube Fwd

Start Date: 12/04/2012

Required Date: 26/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN6-35A

Purchased

No

240

Each

106.0000

4

**

4

AN6-35A

BOLT

Location

Loc Qty

Loc Code

342

50

121181

50

ST342

56

120187

56

4

AN6-36A

Purchased

No

240

Each

116.0000

4

**

4

AN6-36A

Bolt

Location

Loc Qty

Loc Code

ST342

116

118422

2

119449

1

120187

13

120423

100

4

MS21042L6

Purchased

No

240

Each

790.0000

6

**

6

MS21042L6

Nut

Location

Loc Qty

Loc Code

ST300

790

117677

25

118384

3

118927

48

119075

514

120308

200

6

AN960JD616

NAS1149D0663J

Purchased

No

240

Each

0.0000

18

**

12/5/12 11/21/12

AN960JD616

Washer

April-12-12 1:30:59 PM

Shop Packet Print

Page 3

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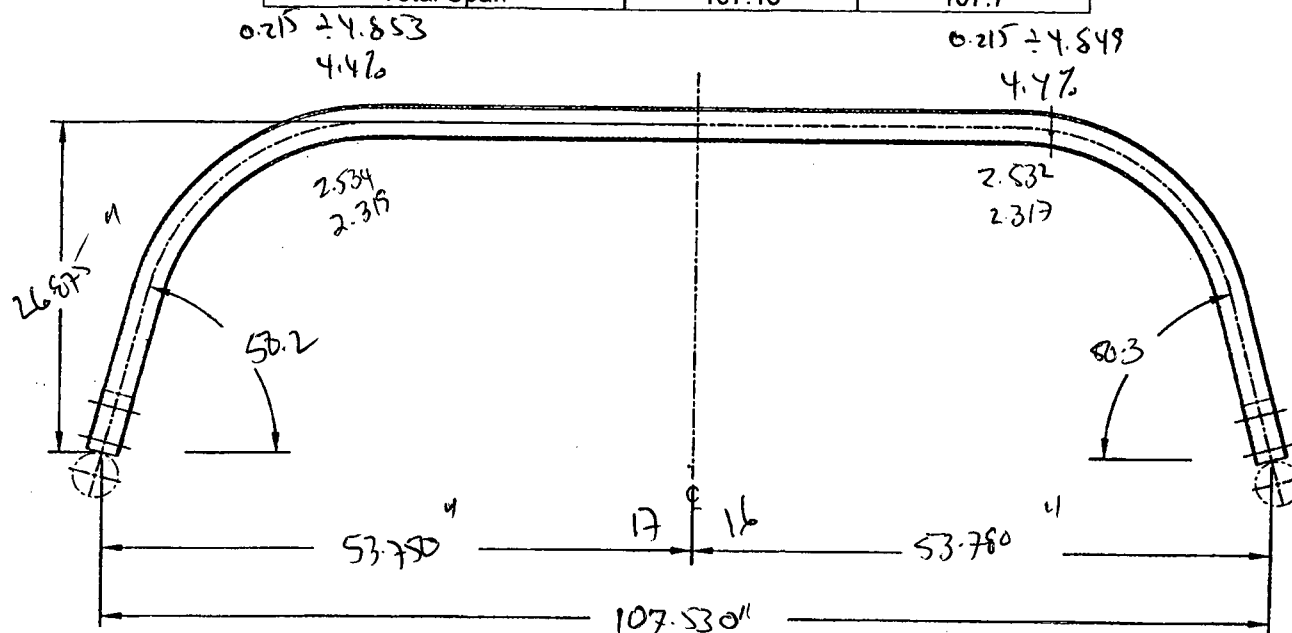
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DART AEROSPACE LTD		Work Order:	83059
Description: Crosstube High Fwd (205/212/412)		Part Number:	D212-664-101
Inspection Dwg: D212-664-141 Rev: D		Page 1 of 1	

Required Dimension	Min	Max
Height	26.79	27.05
1/2 Span	53.59	53.85
Angle	49	52
Total Span	107.18	107.7



Comments
Side Az 4.4% crushing @ 17 Passes
Side B 4.4% crushing @ 16 Passes

QC15 Inspection	<i>S</i>
Date	12/04/16

Rev	Date	Change	Revised by	Approved
A	07.02.06	New Issue	KJ/JM	
B	07.05.31	Dimensions updated per Dwg Rev C	KJ/JM	
C	10.04.01	Dwg Rev updated	KJ	<i>[Signature]</i>

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8 7 6 5 4 3 2 1

03059

12 13 15
D2893-1 SUPPORT
MS21920-25 CLAMP, 2X
D3595-063-450 RUBBER CUSHION, 2X
2 PL

A4-2

A

14.00 (-141)
OR 13.75 (-141B)



D212-664-501
BENT TUBE

SYM

D212-664-141/-141B
ASSEMBLY DETAIL



ECN#11-614
1.07.20
UNDER REVIEW
11.09.13

DEO ATTACHED

RELEASED
2009-10-29

D2893-1
SUPPORT, REF

12
APPLY MAGNOBOND
BETWEEN D2893-1 AND
CROSSTUBE

D3595-063-450
RUBBER CUSHION
UNDER CLAMP, REF

13 15
MS21920-25
CLAMP, REF

SECTION A-A D5-2
SCALE 4X

DESIGN	PH	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	Q	DRAWING NO.	REV. D
MFG. APPR.	DS	D212-664-141	SHEET 2 OF 4
APPROVED	MD	TITLE	SCALE
DE APPR.	HA	XTUBE ASS'Y (205/212/412 HI FWD)	NTS
DATE	09.09.30	COPYRIGHT © 2000 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COVERED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
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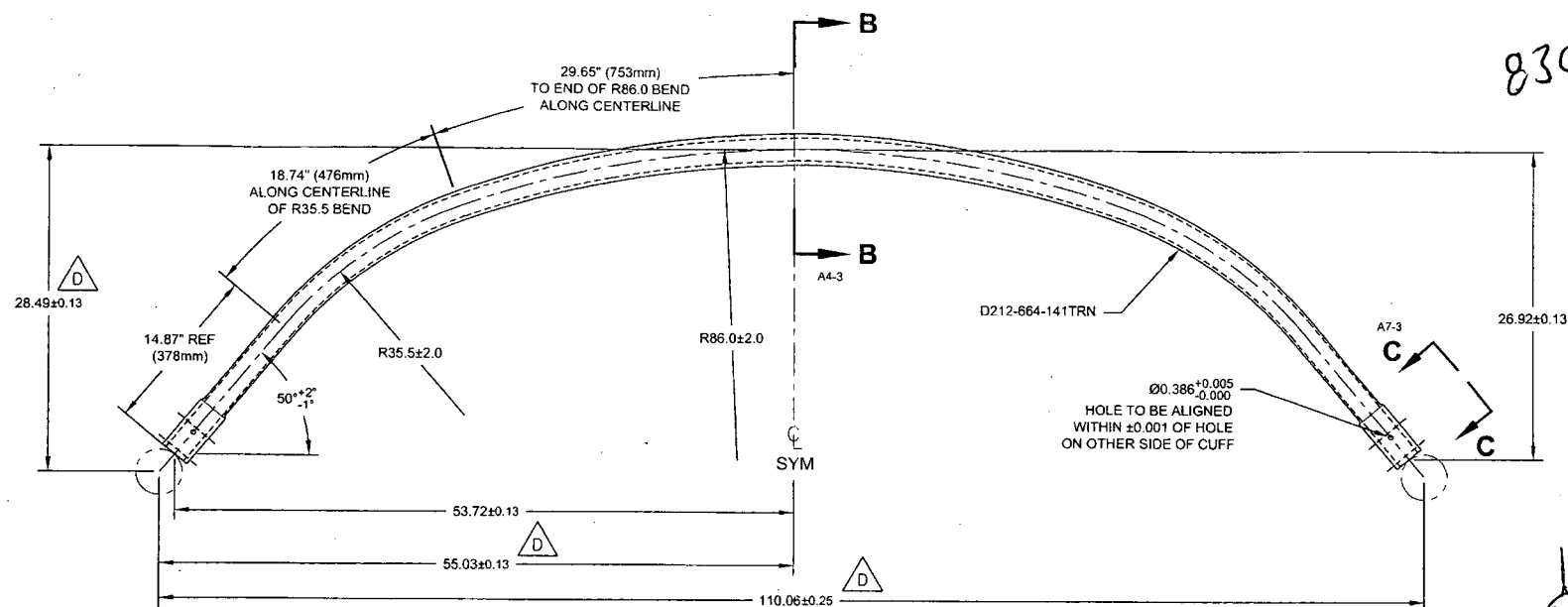
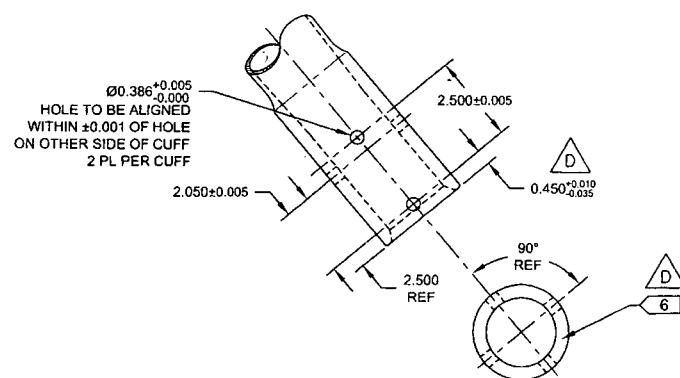
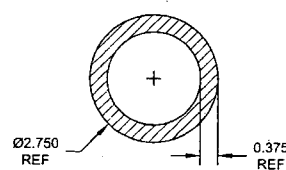
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NOTE: Date & initial all entries

83055

DRAWING NO. D212-664-141	TITLE XTUBE ASSY (205/212/412 HI FWD)	REV. D	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D212-664-141-D-1	SHEET NO. SHEET 2 OF 2	SCALE NTS
DRAWN	CHECKED	MFG. APPR.	APPROVED	DE APPR.			
DATE 11.04.07	DATE 11.04.11	DATE 11.04.12	DATE 11/04/12	DATE 11.04.12			

IS: UNDER REVIEW

C2-4
SEE DETAIL DD212-664-501
BENDING AND DRILLING DETAILVIEW C-C: CUFF DETAIL
SCALE 3XSECTION B-B
SCALE 4X

DEO ATTACHED

RELEASED
2009-10-29

DART AEROSPACE LTD		
HAWKESBURY, ONTARIO, CANADA		
DESIGN	PH	REV. D
DRAWN	RF	SHEET 3 OF 4
CHECKED	Q	SCALE
MFG. APPR.	AS	TITLE
APPROVED	AD	XTUBE ASSY (205/212/412 HI FWD)
DE APPR.	SH	NTS
DATE	09.09.30	COPYRIGHT © 2009 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\FORMS\Quality Assurance\approved QANCRWO RevE

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NOTE: Date & initial all entries

H:\FORMS\Quality Assurance\approved QANCRWO RevE

NOTE: Date & initial all entries

H:\FORMS\Quality Assurance\approved QANCRWO RevE

DRAWING NO. D212-664-141	TITLE CROSSTUBE ASS'Y (205 HI FWD)	REV. D	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D212-664-141-D-2	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>UP</i>	CHECKED <i>ADS</i>	MFG. APPR. <i>AB</i>	APPROVED <i>MD</i>		DE APPR. <i>HT</i>		
DATE 11.07.15	DATE 11.07.20	DATE 11.07.21	DATE 11/07/21		DATE 11.07.21		

PURPOSE:

REPLACE MAGNOBOND WITH PROSEAL.

CHANGE:

IS:

Item	Qty -141	Qty -141B	Part Number	Description
7	A/R	A/R	PROSEAL 890 B-2	SEALANT, AMS-S-8802 CLASS B-2

WAS:

7	A/R	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)
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NOTE 12 & 15, SHEET 1 IS AMENDED AS FOLLOWS:

IS:

- 12) TO INSTALL D2893-1 SUPPORT: ABRASE MATING SURFACE OF SUPPORT AND CROSSTUBE WITH 180-GRIT SANDPAPER AND REMOVE RESIDUE WITH MEK (OR EQUIVALENT). APPLY A 0.04" TO 0.07" THICK LAYER OF PROSEAL 890 CLASS B-2 (OR AMS-S-8802 CLASS B-2) SEALANT TO MATING SURFACE OF SUPPORT.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL 890 SEALANT HAS CURED FOR 72 HOURS.

WAS:

- 12) INSTALL D2893-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF D2893-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

RELEASED
2011-07-28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



LIQUID PENETRANT TEST REPORT

P- 05643

ACUREN

CLIENT

ATTENTION

ADDRESS

PROJECT

ITEM(S) EXAMINED

DATE

ACUREN JOB NO.

PO/NO.

WORK LOCATION

ACCEPTANCE STD.

PAGE

TIME

AM

PM

REV./DATE

JOB DESCRIPTION

PROCEDURE NO. LT-002 REV./DATE 2012

TECHNIQUE NO. LT-002 REV./DATE 2012

PART NO.

MATERIAL

THICKNESS

SCOPE

TEST DETAILS

METHOD	<input checked="" type="checkbox"/> FLUORESCENT	<input type="checkbox"/> VISIBLE	<input checked="" type="checkbox"/> WATER WASH	<input type="checkbox"/> SOLVENT REMOVABLE	<input type="checkbox"/> POST EMULSIFIED
FAMILY BRAND	MAGNA FLUX		BLACK LIGHT S/N	16459	OUTPUT > 1000 μ W/cm ²
PENETRANT	ZL67	MINIMUM DWELL TIME	45 MIN.	LIGHTING EQUIP.	<input type="checkbox"/> FLASHLIGHT <input type="checkbox"/> TROUBLELIGHT
PENETRANT REMOVER	1730	MINIMUM DRY TIME	>10 MIN.	OTHER	LA 3.20
DEVELOPER	SKD 52	MINIMUM DWELL TIME	10 MIN.	LIGHT METER S/N	1098866
DEVELOPER TYPE	<input checked="" type="checkbox"/> NON AQUEOUS	<input type="checkbox"/> AQUEOUS	<input type="checkbox"/> DRY	CAL DUE DATE	12/21/12

TEST SURFACE

SURFACE CONDITION	<input type="checkbox"/> AS GROUND	<input type="checkbox"/> AS WELDED	<input checked="" type="checkbox"/> MACHINED	<input type="checkbox"/> SHOT BLASTED	<input type="checkbox"/> CLEAN BARE METAL
SURFACE TEMPERATURE	<input type="checkbox"/> < -4°C/ 20°F	<input type="checkbox"/> -4°C/ 20°F TO 10°C/50°F	<input checked="" type="checkbox"/> 10°C/50°F TO 52°C/125°F	<input type="checkbox"/> > 52°C/125°F	

RESULTS-

(☐ METRIC ☒ IMPERIAL)

ITEM #	COMMENTS	ACCEPT	ITEM ID	STATUS
1	CRACKS W/ID 83182	✓	ITEM ID: D412-664-203	AFT
2	" W/ID 83183	✓	ITEM ID: D412-664-203	AFT
3	" W/ID 83058	✓	ITEM ID: D212-664-101	FLW
4	" W/ID 83059 ✓	✓	ITEM ID: D212-664-101	FLW
5	" W/ID 81796	✓	ITEM ID: D206-667-207BL	AFT
6	" W/ID 81797	✓	ITEM ID: D206-667-207BL	AFT
7	" W/ID 81270	✓	ITEM ID: D212-664-101	FLW
8	" W/ID 81270	✓	ITEM ID: D212-664-101	FLW

NO RELEVANT INDICATION WAS DETECTED
AS PER APPLICABLE STANDARD AT THE TIME
OF INSPECTION

8/21/13

Scope of Services
The agreement of Acuren Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of Acuren Group Inc. based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as representations or warranties. Acuren Group Inc. is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by Acuren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services referred to herein exceed the amount paid for such services.
In performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

SIGNATURES

CLIENT REPRESENTATIVE

TECHNICIAN (SIGNATURE):

NAME (PRINT):

PRINT

SIGNATURE

1ST TECHNICIAN

CGSB LEVEL 2 SNT LEVEL 2

CGSB REG. NO. 3019

SIGNATURE

2ND TECHNICIAN

CGSB LEVEL 2 SNT LEVEL 2

CGSB REG. NO.

DTR # E34989

REPORT

REVIEWED BY:

NAME

INITIALS

WHITE - CLIENT COPY

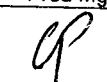

CANARY - OFFICE COPY

PINK - TECHNICIAN COPY

GOLD - OFFICE COPY

PT Sept 2005

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
12.05.03	200/ 210	Apply clear coat to entire of outside surface of crastubey except mask off area of support.				 12.05.03 051042	 12/05/04

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries